



Memorandum

To: Ohio Mathematics Chairs/Leads

From: Dr. Ricardo Moena
Faculty/Lead, Ohio Transfer Module Mathematics, Statistics, and Logic Review
Panel/ Subgroup 2 of the Ohio Mathematics Initiative Chairs/Leads Network

Re: Request for Your Institutional Re-Endorsement of the Proposed Revised
Learning Outcomes for Ohio Transfer Module Calculus I (TMM005) and Calculus
II (TMM006)

Date: April 9, 2018

Background

Subgroup 2 of the Ohio Mathematics Initiative Chairs/Leads Network has been working throughout the summer, fall, and winter 2017-2018 to reassess the Ohio Transfer Module Calculus I (TMM005) and Calculus II (TMM006) course learning outcomes. TMM005 and 006 learning outcomes were last revised and implemented in June 2015.

In November 2017, proposed TMM005 revisions were shared with the Ohio Mathematics Chairs/Leads at the fall network meeting. To allow institutions the innovative approach and flexibility to serve their students with academic rigor and quality, as well as to better align course-learning outcomes, a subset of the Subgroup 2 continued work on Calculus II (TMM006). The project lead, Lee Wayand of Columbus State Community College, presented progress to the rest of Subgroup 2 at a meeting in January 2018 and worked with the subgroup through February 2018 virtually via email to obtain feedback on revisions.

An endorsement survey was sent to institutions in February 2018 with a deadline date of mid-March 2018. In order to address the concerns expressed by some institutions:

- **We have removed most of the non-essential outcomes from the description of TMM005.**
- **We are emphasizing the fact the *sample tasks* are not meant to be *required tasks*. We recognize that institutions offer programs with specific needs and this may determine the type of applications and problem situations presented to students in a calculus course. These *sample tasks* serve to illustrate the depth of understanding and proficiency that Ohio institutions expect from a successful calculus student.**

- **The topics required to achieve the learning outcomes described in TMM005 and TMM006 have not changed, neither has the standard allocation of topics to each one of these courses. The fact that many students are admitted into Ohio institutions with AP credit requires us to align our courses with AP courses. This is the reason why we decided to remove an introduction to vectors as essential in TMM006.**
- **The guidelines are phrased for faculty teaching the subject to make academic decisions about coverage details at the institutional level. Faculty should make these decisions so that a student who successfully completes the learning objectives and achieves the student outcomes of TMM-005-006 will have a high probability of success in follow up TAG courses, such as Differential Equations, Multivariate Calculus, and Linear Algebra at any Ohio public institution.**

In the attached, you will find draft documents with updated OTM learning outcomes for TMM005 Calculus I and TMM006 Calculus II.

What We Need from You

In order for Subgroup 2 work to move forward, Subgroup 2 seeks re-endorsement of the proposed changes to TMM005 and TMM006 from the Ohio Mathematics Initiative Chairs/Leads Network. Please review the documents containing the proposed revisions that were sent to you with the re-endorsement request email. Please provide one collective response from your institution, especially if you are consulting with your faculty before entering information into the survey.

Please make only one submission per institution.

Important Note: Your institution **MUST** complete the survey via the link provided above. The attached PDF file is for reference only. **Do not use the PDF version to respond to the survey.**

Should you have any questions, please feel free to contact Jessi Spencer at (614) 728-4706 or jspencer@highered.ohio.gov.

Attachments 3